Flow Chemistry Publications

The following (non-exhaustive) list of papers shows peer reviewed work that has been published using the Vapourtec R-Series and E-Series flow chemistry systems. As new work is continually published, please check on our website for updates.

Enantiospecific cyclization of methyl N-(tert-butoxycarbonyl)-N-(3-chloropropyl)-D-alaninate to 2-methylproline derivative via 'memory of chirality' in flow
Gianvito Vilé [1], Gunther Schmidt [2], Sylvia Richard-Bildstein [1], Stefan Abele [2]
[1] Drug Discovery Chemistry, Idorsia Pharmaceuticals Ltd., Allschwil, Switzerland
[2] Chemical Development, Idorsia Pharmaceuticals Ltd., Allschwil, Switzerland
https://link.springer.com/article/10.1007/s41981-018-0022-5

Mg-Catalyzed OPPenauer Oxidation—Application to the Flow Synthesis of a Natural Pheromone
Virginie Liautard, Mélodie Birepinte, Camille Bettoli and Mathieu Pucheault *
Institut des Sciences Moléculaires (ISM), UMR 5255 CNRS—Université de Bordeaux, 351 Cours de la Libération, 33405 Talence CEDEX, France
https://www.mdpi.com/2073-4344/8/11/529

Dehydration of an Insoluble Urea Byproduct Enables the Condensation of DCC and Malonic Acid in Flow
Alexander G. O'Brien*, Eric M. Ricci, and Michel Journet
GlaxoSmithKline, 709 Swedeland Road, King of Prussia, Pennsylvania 19406, United States
https://pubs.acs.org/doi/abs/10.1021/acs.oprd.7b00375

Self-Sufficient Flow-Biocatalysis by Coimmobilization of Pyridoxal 5′-Phosphate and ω-Transaminases onto Porous Carriers
Ana I. Benítez-Mateos[†], Martina L. Contente[§], Susana Velasco-Lozano[⊥], Francesca Paradisi*[§], and Fernando López-Gallego*[⊥‡]
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https://pubs.acs.org/doi/10.1021/acssuschemeng.8b02672

A Convergent Continuous Multistep Process for the Preparation of C4-Oxime-Substituted Thiazoles
Edouard Godineau *[†], Claudio Battilocchio [†‡], Matthias Lehmann [†], Steven V. Ley [‡], Ricardo Labes [‡], Letitia Birnoschi [‡], Srinivas Subramanian [§], C.S Prasanna [§], Amol Gorde [§], Mahesh Kalbagh [§], Vivek Khade [§], Anton Scherrer [†], Anthony C. O'Sullivan [†]
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https://pubs.acs.org/doi/abs/10.1021/acs.oprd.8b00095

Additive Free Fe-Catalyzed Conversion of Nitro to Aldehyde under Continuous Flow Module
Sandip G. Agalave, Moreshwar B. Chaudhari, Girish Singh Bisht and Boopathy Gnanaprakasam*
Department of Chemistry, Indian Institute of Science Education and Research Pune-411008, India
https://pubs.acs.org/doi/abs/10.1021/acssuschemeng.8b02090

Recent Advances in Photodecarboxylations Involving Phthalimides
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http://www.publish.csiro.au/CH/CH18220

C–H functionalisation of aldehydes using light generated, non-stabilised diazo compounds in flow†
Paul Dingwall [a], Andreas Greb [a], Lorène N. S. Crespin [a], Ricardo Labes [a], Biagia Musio [a], Jian-Siang Poh [a], Patrick Pasau [b], David C. Blakemore [c] and Steven V. Ley *[a]

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https://pubs.rsc.org/en/content/articlehtml/2018/cc/c8cc06202a

Catalytic Static Mixers for the Continuous Flow Hydrogenation of a Key Intermediate of Linezolid (Zyvox)
James Gardiner *, Xuan Nguyen †, Charlotte Genet †, Mike D. Horne ‡, Christian Hornung †, John Tsanaktsidis †
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https://pubs.acs.org/doi/abs/10.1021/acs.oprd.8b00153

Photoinduced Palladium Negishi Cross-Coupling Through Visible Light Absorption of Palladium-Organozinc complexes
Irini Abdiaj [a], Lena Huck [a,b], José Miguel Mateo [b], Antonio de la Hoz [b], M. Victoria Gomez [c], Angel Díaz-Ortiz [b], and Jesús Alcázar [a*]
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https://onlinelibrary.wiley.com/doi/abs/10.1002/anie.201808654

Three-component assembly of multiply substituted homoallylic alcohols and amines using a flow chemistry photoreactor
Yiding Chen†, David Blakemore‡, Patrick Pasau§ and Steven V. Ley†
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https://pubs.acs.org/doi/10.1021/acs.orglett.8b02907

Mild Homologation of Esters via Continuous Flow Chloroacetate Claisen Reactions
Maximilian A. Ganiek, Maria V. Ivanova, Benjamin Martin* and Paul Knochel*
Department of Chemistry, Ludwig-Maximilians-Universität Munich, Butenandtstr. 5 – 13, 81377 Munich, Germany
https://www.ncbi.nlm.nih.gov/pubmed/30290045

Regioselective Chlorination of Quinoline Derivatives via Fluorine Mediation in a Microfluidic Reactor
Hao Qi, Xin Li, Zhuang Liu, Shan-Shan Miao, Prof. Zheng Fang, Lin Chen, Zheng Fang, Prof. Kai Guo
College of Biotechnology and Pharmaceutical Engineering, Nanjing Tech University, Nanjing, China
State Key Laboratory of Materials-Oriented Chemical Engineering, Nanjing Tech University, Nanjing, China
https://onlinelibrary.wiley.com/doi/full/10.1002/slct.201802925

Continuous flow synthesis of a carbon-based molecular cage macrocycle *via* a three-fold homocoupling reaction
Melanie Kitchin,[ab] Kristina Konstas,[a] Christopher J. Sumby,[b] Milena L. Czyz,[a] Peter Valente,[b] Matthew R. Hill,*[ab] Anastasios Polyzos*[ac] and Christian J. Doonan*[ab]
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https://pubs.rsc.org/en/content/articlelanding/2015/cc/c5cc05181a#!divAbstract

Flow-based biocatalysis: Application to peracetylated arabinofuranosyl-1,5-arabinofuranose synthesis
Teodora Bavaro[a], Andrea Pinto[b], Federica Dall'Oglio[c], María J. Hernáiz[d], Carlo F. Morelli[e], Paolo Zambelli[b], Carlo De Micheli[c], Paola Conti[c], Lucia Tamborini[c], Marco Terreni[a]
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https://www.sciencedirect.com/science/article/pii/S1359511318302484

Continuous Flow Photochemical Benzylic Bromination of a Key Intermediate in the Synthesis of a 2-Oxazolidinone

Y Chen, O de Frutos, C Mateos, JA Rincon, D Cantillo, C Olivier Kappe
https://onlinelibrary.wiley.com/doi/abs/10.1002/cptc.201800114

Native Chemical Ligation–Photodesulfurization in Flow
Timothy S. Chisholm, Daniel Clayton, Luke J. Dowman, Jessica Sayers, Richard J. Payne
School of Chemistry, The University of Sydney, Sydney, NSW 2006, Australia
https://pubs.acs.org/doi/10.1021/jacs.8b03115

Continuous flow biocatalysis
Joshua Britton, Sudpta Majumdar, Gregory A. Weiss
Department of Chemistry, Molecular Biology and Biochemistry, University of California, Irvine, USA
http://pubs.rsc.org/en/content/articlelanding/2018/cs/c7cs00906b/unauth#!divAbstract

Reductive aminations using a 3D printed supported metal(0) catalyst system
Charlotte Genet[1], Xuan Nguyen[1], Bita Bayatsarmadi[2], Mike D. Horne[2], James Gardiner[1], Christian H. Hornung[1]
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https://link.springer.com/article/10.1007/s41981-018-0013-6

Flow Synthesis of Coumalic Acid and its Derivatization
Laura K. Smith and Ian R. Baxendale
Department of Chemistry, University of Durham, South Road, Durham, DH1 3LE, UK.
https://pubs.rsc.org/en/content/articlelanding/2018/re/c8re00116b#!divAbstract

Combining CH functionalisation and flow photochemical heterocyclic metamorphosis (FP-HM) for the

Combining CH functionalisation and flow photochemical heterocyclic metamorphosis (FP-HM) for the

synthesis of benzo [1, 3] oxazepines
Jasraj S. Babra, Andrew T. Russell, Christopher D. Smith, Yuxiong Zhang
Department of Chemistry, University of Reading, Whiteknights, Reading, RG6 6AD, UK
https://www.sciencedirect.com/science/article/pii/S0040402018306148

Studies toward the scaling of gas-liquid photocycloadditions
Dr. Emily B. Corcoran, Dr. François Lévesque, Dr. Jonathan P. McMullen, Dr. John R. Naber
Department of Process Research and Development, Merck Sharp & Dohme Corp., Rahway, USA
https://onlinelibrary.wiley.com/doi/full/10.1002/cptc.201800098

Photooxygenation in an advanced led-driven flow reactor module: Experimental investigations and modelling
Robbie Radjagobalou[ab], Jean-François Blanco[a], Odile Dechy-Cabaret[b], Michael Oelgemöller[c], Karine Loubière
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https://www.sciencedirect.com/science/article/abs/pii/S0255270118304355

P-121: Successive and scalable synthesis of highly stable Cs_4PbBr_6 perovskite microcrystal by microfluidic system and their application in backlight display
Hung-Chia Wang, Zhen Bao, Ru-Shi Liu
Department of Chemistry, National Taiwan UniversityTaipei, Taiwan
Department of Mechanical Engineering and Graduate Institute of Manufacturing Technology, National Taipei University of TechnologyTaipei, Taiwan
https://onlinelibrary.wiley.com/doi/abs/10.1002/sdtp.12305

Self-sustaining closed-loop multienzyme-mediated conversion of amines into alcohols in continuous reactions
Martina L. Contente, Francesca Paradisi
School of Chemistry, University of Nottingham, Nottingham, United Kingdom
https://www.nature.com/articles/s41929-018-0082-9

Dichlorophenylacrylonitriles as AhR Ligands displaying selective breast cancer cytotoxicity in vitro

Jennifer R Selective Oxidation of Sulfides in Flow Chemistry

[1], Jayne Gilbert[2], Stefan Paula[3], Xiao Zhu[3], Jennette A Sakoff[2], Adam McCluskey[1]
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https://onlinelibrary.wiley.com/doi/abs/10.1002/cmdc.201800256

Combining C-H functionalisation and flow photochemical heterocyclic metamorphosis (FP-HM) for the synthesis of benzo[1,3]oxazepines
Jasraj S. Babra, Andrew T. Russell, Christopher D. Smith, Yuxiong Zhang
Department of Chemistry, University of Reading, Whiteknights, Reading, RG6 6AD, UK
https://www.sciencedirect.com/science/article/pii/S0040402018306148

Multistep Continuous-Flow Processes for the Preparation of Heterocyclic Active Pharmaceutical Ingredients
Romaric Gérardy, Jean-Christophe M. Monbaliu
Center for Integrated Technology and Organic Synthesis, Department of Chemistry, University of Liège, Liège, Belgium
https://link.springer.com/chapter/10.1007/7081_2018_21

Flow Chemistry Approaches Applied to the Synthesis of Saturated Heterocycles
Marcus Baumann, Ian R. Baxendale
Department of Chemistry, University of Durham, Durham, UK
https://link.springer.com/chapter/10.1007/7081_2018_16

An efficient benzoxaborole one-pot synthesis by SiliaCat DPP-Pd heterogeneous catalysis using diboronic acid
Kana kunihiro, Laurence Dumais, Guillaume Lafitte, Emeric Varvier, Loïc Tomas, Craig Harris
Nestlé Skin Health, Galderma R&D, France
Ecole Nationale Supérieure des Ingenieurs en Arts Chimiques et Technologiques, France
https://onlinelibrary.wiley.com/doi/abs/10.1002/adsc.201800262

Total Synthesis of Neomarchantin A: Key Bond Constructions Performed Using Continuous Flow Methods
Émilie Morin, Michaël Raymond, Amaury Dubart, and Shawn K. Collins
Department of Chemistry and Centre for Green Chemistry and Catalysis, Université de Montréal, CP 6128 Station Downtown, Montréal, Québec, Canada H3C 3J7
https://pubs.acs.org/doi/10.1021/acs.orglett.7b01127

In situ epoxide generation by dimethyldioxirane oxidation and the use of epichlorohydrin in the flow synthesis of a library of β-amino alcohols
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http://rsos.royalsocietypublishing.org/content/5/4/171190

Safe Use of Hazardous Chemicals in Flow
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https://link.springer.com/chapter/10.1007/7081_2018_17

Photochemical Synthesis of Heterocycles: Merging Flow Processing and Metal-Catalyzed Visible Light Photoredox Transformations
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Institute of Chemistry, University of Graz, Graz, Austria
https://link.springer.com/chapter/10.1007/7081_2018_20

Flow Chemistry as a Drug Discovery Tool: A Medicinal Chemistry Perspective
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https://link.springer.com/chapter/10.1007/7081_2018_24

Copper mediated, heterogeneous, enantioselective intramolecular Buchner reactions of α-diazoketones using continuous flow processing
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https://pubs.acs.org/doi/abs/10.1021/acs.joc.8b00147

Functionalization of Heteroarenes Under Continuous Flow
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https://link.springer.com/chapter/10.1007/7081_2018_22

Photoredox Iridium–Nickel Dual-Catalyzed Decarboxylative Arylation Cross-Coupling: From Batch to Continuous Flow via Self-Optimizing Segmented Flow Reactor
Hsiao-Wu Hsieh†, Connor W. Coley‡, Lorenz M. Baumgartner‡, Klavs F. Jensen*‡, and Richard I. Robinson*†
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https://pubs.acs.org/doi/abs/10.1021/acs.oprd.8b00018

A combination of flow and batch mode processes for the efficient preparation of $mGlu_{2/3}$ receptor negative allosteric modulators (NAMs)
Raveendra Panickar Dhanya, Ananda Herath, Douglas J. Sheffler, Nicholas D.P. Cosford
Cancer Metabolism and Signaling Networks Program, NCI-Designated Cancer Center, Sanford Burnham Prebys Medical Discovery Institute, 10901 N. Torrey Pines Rd., La Jolla, CA 92037, USA
https://www.sciencedirect.com/science/article/pii/S004040201830351X

On-demand synthesis of organozinc halides under continuous flow conditions
Mateo Berton, Lena Huck, Jesús Alcázar
Lead Discovery, Janssen Research and Development, Janssen-Cilag, S.A., Toledo, Spain
https://www.nature.com/articles/nprot.2017.141

Generation of Diversity Sets with High sp3 Fraction Using the Photoredox Coupling of Organotrifluoroborates and Organosilicates with Heteroaryl/Aryl Bromides in Continuous Flow
Kevin D Raynor, Gregory D May, Upul K. Bandarage, and Michael J. Boyd
Vertex Pharmaceuticals Inc., 50 Nothern Avenue, Boston, Massachusetts 02210, United States.
https://www.ncbi.nlm.nih.gov/pubmed/29281285

Iron-Catalyzed Batch/Continuous Flow C-H Functionalization Module for the Synthesis of Anticancer Peroxides
Moreshwar Bhagwan Chaudhari, Suresh Moorthy, Sohan Patil, Girish Singh Bisht, Haneef Mohamed, Sudipta Basu, and Boopathy Gnanaprakasam
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http://pubs.acs.org/doi/abs/10.1021/acs.joc.7b02854

Selective *N*-monomethylation of primary anilines with dimethyl carbonate in continuous flow
Hyowon Seo, Anne-Catherine Bédard, Willie P. Chen, Robert W. Hicklin, Alexander Alabugin, Timothy F. Jamison
Department of Chemistry, Massachusetts Institute of Technology, 77 Massachusetts Ave., Cambridge, MA 02139, USA
https://www.sciencedirect.com/science/article/pii/S0040402017312346

Continuous flow multistep synthesis of α-functionalized esters via lithium enolate intermediates

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https://www.sciencedirect.com/science/article/pii/S004040201731222X

A concise flow synthesis of indole-3-carboxylic ester and its derivatisation to an auxin mimic
Marcus Baumann, Ian R. Baxendale and Fabien Deplante
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https://www.beilstein-journals.org/bjoc/articles/13/251

Synthesis, physicochemical properties, and biological activity of bile acids 3-glucuronides: Novel insights into bile acid signalling and detoxification
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https://www.sciencedirect.com/science/article/pii/S0223523417310401

Conjugated polymers via direct arylation polymerization in continuous flow: minimizing the cost and batch-to-batch variations for high-throughput energy conversion
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http://onlinelibrary.wiley.com/doi/10.1002/marc.201700526/full

Recent advances of microfluidics technologies in the field of medicinal chemistry
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http://www.sciencedirect.com/science/article/pii/S0065774317300192

Sustainable flow synthesis of a versatile cyclopentenone building block
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http://pubs.acs.org/doi/abs/10.1021/acs.oprd.7b00328

Auto-tandem catalysis: Pd(II)-catalysed dehydrogenation/oxidative Heck of Cyclopentane-1,3-diones
Claire J C Lamb, Bryan G Nderitu, Gemma McMurdo, John MTobin, Filipe Vilela, and Ai-Lan Lee
Institute of Chemical Sciences, Heriot-Watt University, Edinburgh EH14 4AS, United Kingdom
http://onlinelibrary.wiley.com/doi/10.1002/chem.201704442/pdf

Exploring effects of intermittent light upon visible light promoted water oxidations
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http://pubs.rsc.org/en/content/articlepdf/2017/se/c7se00304h

Telescoped continuous flow generation of a library of highly substituted 3-thio-1,2,4-triazoles.
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http://pubs.rsc.org/en/content/articlehtml/2017/re/c7re00125h

Targeting a mirabegron precursor by BH_3-mediated continuous flow reduction process

Sonia De Angelis[a], Claudia Carlucci[a], Modesto de Candia[a], Gabriele Rebuzzini[b], Paolo Celestini[b], Massimiliano Riscazzi[b], Renzo Luisi[a,], Leonardo Degennaro[a]
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http://www.sciencedirect.com/science/article/pii/S0920586117306739

In situ preparation and consumption of O-Mesitylsulfonylhydroxylamine (MSH) in continuous flow for the amination of pyridines

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https://www.thieme-connect.com/products/ejournals/abstract/10.1055/s-0036-1588799

Highly efficient oxidation of amines to aldehydes with flow-based biocatalysis

Dr. Martina L. Contente[1,2], Federica Dall'Oglio[3], Dr. Lucia Tamborini[3], Prof. Francesco Molinari[4],Prof. Francesca Paradisi[1,2]
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http://onlinelibrary.wiley.com/doi/10.1002/cctc.201701147/full

Novel polystyrene-immobilized chiral amino alcohols as heterogeneous ligands for the enantioselective Arylation of Aldehydes in Batch and Continuous Flow Regime

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http://www.sciencedirect.com/science/article/pii/S0920586117305771

An efficient and green pathway for continuous Friedel-Crafts acylation over α-Fe_2O_3 and $CaCO_3$ nanoparticles prepared in the microreactors

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http://www.sciencedirect.com/science/article/pii/S1385894717314845

A nanoporous graphene analog for superfast heavy metal removal and continuous-flow visible-light photoredox catalysis

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http://pubs.rsc.org/en/content/articlelanding/2017/ta/c7ta05534j#!divAbstract

A novel micro-flow system under microwave irradiation for continuous synthesis of 1, 4-dihydropyridines in the absence of solvents via Hantzsch reaction

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http://www.sciencedirect.com/science/article/pii/S1385894717314444

Methanolysis of epoxidized soybean oil in continuous flow conditions

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Visible-light-induced trifluoromethylation of highly functionalized arenes and heteroarenes in continuous flow
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Continuous preparation and use of dibromoformaldoxime as a reactive intermediate for the synthesis of 3-bromoisoxazolines
Claudio Battilocchio, Francesco Bosica, Sam M. Rowe, Bruna Lacerda Abreu, Edouard Godineau, Matthias Lehmann, and Steven V Ley
http://pubs.acs.org/doi/abs/10.1021/acs.oprd.7b00229

Chemoenzymatic synthesis in flow reactors: a rapid and convenient preparation of captopril
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Preparation of polyfunctional diorgano-magnesium and - zinc reagents using in situ trapping halogen-lithium exchange of highly functionalized (hetero)aryl halides in continuous flow
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http://onlinelibrary.wiley.com/doi/10.1002/anie.201706609/full

Flow assisted synthesis: a key fragment of SR 142948A
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Singlet oxygen oxidations in homogeneous continuous flow using a gas–liquid membrane reactor
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A convenient, mild and green synthesis of NH-sulfoximines in flow reactors
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http://onlinelibrary.wiley.com/doi/10.1002/ejoc.201700850/full

A Continuous flow method for the desulfurization of substituted thioimidazoles applied to the synthesis of new etomidate derivatives
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http://onlinelibrary.wiley.com/doi/10.1002/ejoc.201700833/full

High throughput photo-oxidations in a packed bed reactor system
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Phase separation macrocyclization in a complex pharmaceutical setting: application toward the synthesis of Vaniprevir
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Grignard Reagents on a Tab: Direct Magnesium Insertion under Flow Conditions
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Co-production of HMF and gluconic acid from sucrose by chemo-enzymatic method
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Efficient synthesis of 5-(chloromethyl) furfural (CMF) from high fructose corn syrup (HFCS) using continuous flow processing
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http://pubs.rsc.org/en/content/articlelanding/2017/re/c7re00039a/unauth#!divAbstract

Barbier continuous flow preparation and reactions of carbamoyllithiums for nucleophilic amidation
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Polymer-supported photosensitizers for oxidative organic transformations in flow and under visible light Irradiation
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Direct valorisation of waste cocoa butter triglycerides via catalytic epoxidation, ring-opening and polymerisation
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Hydrogen sulfide chemistry in continuous flow: Efficient synthesis of 2-oxopropanethioamide
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Automating multistep flow synthesis: approach and challenges in integrating chemistry, machines and

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https://www.beilstein-journals.org/bjoc/articles/13/97/i/2

Utilizing on- and off-line monitoring tools to follow a kinetic resolution step during flow synthesis
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Flow Synthesis of Cyclobutanones via [2+2] Cycloaddition of Keteneiminium Salts and Ethylene Gas
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http://pubs.rsc.org/en/content/articlelanding/2017/re/c7re00020k/unauth#!divCitation

Continuous Flow α‑Arylation of N,N‑Dialkylhydrazones under Visible-Light Photoredox Catalysis
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Utilization of flow chemistry in catalysis: New avenues for the selective synthesis of Bis(indolyl)methanes
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Continuous-flow synthesis of highly functionalized imidazo-oxadiazoles facilitated by microfluidic extraction
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http://www.beilstein-journals.org/bjoc/content/pdf/1860-5397-13-26.pdf

Preparation of Forced Gradient Copolymers Using Tube-in-Tube Continuous Flow Reactors
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http://onlinelibrary.wiley.com/doi/10.1002/mren.201600065/full

A Continuous Flow Synthesis and Derivatization of 1,2,4-Thiadiazoles
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http://www.sciencedirect.com/science/article/pii/S0968089617300901

Self-optimisation and model-based design of experiments for developing a C–H activation flow process
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Multi-Step Continuous-Flow Synthesis
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Diels–Alder reactions of myrcene using intensified continuous-flow reactors
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http://www.beilstein-journals.org/bjoc/single/articleFullText.htm?publicId=1860-5397-13-15

Active Site-Mapping of Xylan-Deconstructing Enzymes with Arabinoxylan Oligosaccharides Produced by Automated Glycan Assembly
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Mixed-Linkage Glucan Oligosaccharides Produced by Automated Glycan Assembly Serve as Tools to Determine the Substrate Specificity of Lichenase
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Improving the throughput of batch photochemical reactions using flow: Dual photoredox and nickel catalysis in flow for C(sp^2) C(sp^3) cross-coupling
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http://www.sciencedirect.com/science/article/pii/S096808961631495X

Synthesis of Cycloalkyl Substituted 7-Azaindoles via Photoredox Nickel Dual Catalytic Cross-Coupling in Batch and Continuous Flow
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Acridinium-Based Photocatalysts: A Sustainable Option in Photoredox Catalysis
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Halogenation of organic compounds using continuous flow and microreactor technology
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http://pubs.rsc.org/en/content/articlelanding/2017/re/c6re00186f/unauth#!divAbstract

Application of the Photoredox Coupling of Trifluoroborates and Aryl Bromides to Analog Generation Using Continuous Flow
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Design and Development of Pd-catalyzed Aerobic N-Demethylation Strategies for the Synthesis of Noroxymorphone in Continuous Flow Mode
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γ-Glutamyl-dipeptides: Easy tools to rapidly probe the stereoelectronic properties of the ionotropic glutamate receptor binding pocket
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Expedited access to thieno[3,2-*c*]quinolin-4(5*H*)-ones and benzo[*h*]-1,6-naphthyridin-5(6*H*)-ones *via* a continuous flow photocyclization method
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http://pubs.rsc.org/-/content/articlelanding/2016/ob/c6ob02279k#!divAbstract

A benchtop NMR spectrometer as a tool for monitoring mesoscale continuous-flow organic synthesis: equipment interface and assessment in four organic transformations
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http://pubs.rsc.org/en/content/articlelanding/2016/ra/c6ra19662d#!divAbstract

BODIPY-based conjugated microporous polymers as reusable heterogeneous photosensitisers in a photochemical flow reactor
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http://pubs.rsc.org/en/content/articlelanding/2016/py/c6py01393g#!divAbstract

Reformatsky and Blaise reactions in flow as a tool for drug discovery. One pot diversity oriented synthesis of valuable intermediates and heterocycles
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http://pubs.rsc.org/en/content/articlelanding/2016/gc/c6gc02619b#!divAbstract

Visible light activation of Boronic Esters enables efficient photoredox C(sp^2)–C(sp^3) cross-couplings in flow
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Engineering chemistry: integrating batch and flow reactions on a single, automated reactor platform
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Triphenylphosphine-grafted, RAFT-synthesised, porous monoliths as catalysts for Michael addition in flow synthesis
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Ethyl Lithiodiazoacetate: Extremely Unstable Intermediate Handled Efficiently in Flow
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A facile hybrid 'flow and batch' access to substituted 3,4-dihydro-2*H*-benzo[*b*][1,4]oxazinones
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http://pubs.rsc.org/is/content/articlelanding/2016/ob/c6ob01153e#!divAbstract

Continuous flow biocatalysis: production and in-line purification of amines by immobilised transaminase from *Halomonas elongata*
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http://pubs.rsc.org/en/content/articlelanding/2017/gc/c6gc01780k#!divAbstract

A laboratory-scale continuous flow chlorine generator for organic synthesis
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Continuous processing and efficient in situ reaction monitoring of a hypervalent iodine (III) mediated cyclopropanation using benchtop NMR spectroscopy
Batool Ahmed-Omer, Eric Sliwinski, John Paul Cerroti, Steven V Ley
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Aryl amination using ligand-free Ni(II) salts and photoredox catalysis
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http://science.sciencemag.org/content/early/2016/06/22/science.aag0209

Catalytic Chan-Lam coupling using a 'tube-in-tube' reactor to deliver molecular oxygen as an oxidant
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An approach to the synthesis of 4-aryl and 5-aryl substituted thiazole-2(3H)-thiones employing flow processing
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Flow carbonylation of sterically hindered ortho-subsituted iodoarenes
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Exploring flow procedures for diazonium formation
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http://www.mdpi.com/1420-3049/21/7/918/htm

Catalytic macrocyclization strategies using continuous flow: formal total synthesis of ivorenolide A
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Delivering enhanced efficiency in the synthesis of α-diazosulfoxides by exploiting the process control enabled in flow
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http://www.akademiai.com/doi/abs/10.1556/1846.2016.00013

Continuous-flow synthesis and derivatization of aziridines through palladium-catalyzed C(sp^3)−H activation
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http://onlinelibrary.wiley.com/wol1/doi/10.1002/anie.201602483/full

Metal-free borylation of electron-rich aryl(pseudo)halides under continuous-flow photolytic conditions
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http://pubs.rsc.org/en/content/articlelanding/2016/qo/c6qo00109b#!divAbstract

Difluorocarbene addition to alkenes and alkynes in continuous flow
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A simple setup for transfer hydrogenations in flow chemistry
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https://www.thieme-connect.com/products/ejournals/abstract/10.1055/s-0035-1561624

A scalable and operationally simple radical trifluoromethylation
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http://www.nature.com/ncomms/2015/150810/ncomms8919/full/ncomms8919.html

Photoactive and metal-free polyamide-based polymers for water and wastewater treatment under visible light irradiation

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http://www.sciencedirect.com/science/article/pii/S0926337316302818

Biodiesel synthesis using integrated acid and base catalysis in continuous flow

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http://www.sciencedirect.com/science/article/pii/S0040402016302046

The generation of a library of bromodomain-containing protein modulators expedited by continuous flow synthesis

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http://onlinelibrary.wiley.com/doi/10.1002/ejoc.201600222/abstract

An efficient etherification of *Ginkgol biloba* extracts with fewer side effects in a micro-flow system

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http://www.sciencedirect.com/science/article/pii/S1001841716300705

Fine chemical syntheses under flow using SiliaCat catalysts

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http://pubs.rsc.org/en/content/articlelanding/2016/cy/c6cy00038j#!divAbstract

Continuous-flow synthesis of 2H-azirines and their diastereoselective transformation to aziridines

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http://community.dur.ac.uk/i.r.baxendale/papers/Synlett2016.27.159.pdf

Continuous flow magnesiation or zincation of acrylonitriles, acrylates, and nitroolefins. Application to the synthesis of butenolides

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http://pubs.acs.org/doi/abs/10.1021/acs.orglett.6b00086

Continuous flow photo-initiated RAFT polymerisation using a tubular photochemical reactor

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http://www.sciencedirect.com/science/article/pii/S0014305716300325

Continuous-flow photochemistry: a need for chemical engineering

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http://www.sciencedirect.com/science/article/pii/S0255270116300393

Efficient metal-free photochemical borylation of aryl halides under batch and continuous-flow conditions†
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http://pubs.rsc.org/en/content/articlehtml/2016/sc/c5sc04521e

Continuous flow photochemistry as an enabling synthetic technology: synthesis of substituted-6(5*H*)-phenanthridinones for use as poly (ADP-ribose) polymerase inhibitors
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http://pubs.rsc.org/en/content/articlelanding/2014/md/c5md00552c#!divAbstract

Controlled generation and use of CO in flow†‡
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http://pubs.rsc.org/en/content/articlehtml/2016/re/c6re00020g

The solid copper-mediated C-N cross-coupling of phenylboronic acids under continuous flow conditions
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http://www.sciencedirect.com/science/article/pii/S0040403915305207

Visible-light photoredox catalysis using a macromolecular ruthenium complex: reactivity and recovery by size-exclusion nanofiltration in continuous flow†
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http://pubs.rsc.org/en/content/articlehtml/2016/cy/c6cy00070c

Integrating multicomponent flow synthesis and computational approaches for the generation of a tetrahydroquinoline compound based library
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http://pubs.rsc.org/en/content/articlelanding/2015/md/c5md00455a#!divAbstract

The expanding utility of continuous flow hydrogenation
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http://pubs.rsc.org/en/content/articlelanding/2015/ob/c5ob01067e#!divAbstract

Highly efficient and safe procedure for the synthesis of aryl 1,2,3-triazoles from aromatic amine in a continuous flow reactor
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http://www.sciencedirect.com/science/article/pii/S0040403910013675

Studies of a diastereoselective electrophilic fluorination reaction employing a cryo-flow reactor
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http://community.dur.ac.k/i.r.baxendale/papers/Synlett.2013.24.1298.pdf

The changing face of organic synthesis
Authors: Ley, Steven V.; Baxendale, Ian R.
Source: CHIMIA International Journal for Chemistry, Volume 62, Number 3, March 2008, pp. 162-168(7)
http://community.dur.ac.uk/i.r.baxendale/papers/Chimia2008.62.162.pdf

A novel internet-based reaction monitoring, control and autonomous self-optimization platform for chemical synthesis
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http://pubs.acs.org/doi/abs/10.1021/acs.oprd.5b00313

Thermolysis of 1,3-dioxin-4-ones: fast generation of kinetic data using in-line analysis under flow
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http://pubs.rsc.org/en/content/articlelanding/2016/re/c5re00007f/unauth#!divAbstract

Continuous heterogeneously catalyzed oxidation of benzyl alcohol in a ceramic membrane packed-bed reactor
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http://pubs.acs.org/doi/abs/10.1021/acs.oprd.5b00220

Automated glycan assembly of xyloglucan oligosaccharides
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http://pubs.rsc.org/en/content/articlelanding/2016/ob/c5ob02226f/unauth#!divAbstract

Continuous flow Buchwald–Hartwig amination of a pharmaceutical intermediate†
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http://pubs.rsc.org/is/content/articlehtml/2016/re/c5re00048c

An efficient continuous flow process for the synthesis of a non-conventional mixture of fructooligosaccharides
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http://www.sciencedirect.com/science/article/pii/S0308814615008808

Dynamic flow synthesis of porous organic cages
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http://pubs.rsc.org/en/content/articlelanding/2015/cc/c5cc07447a#!divAbstract

Continuous photochemistry: the flow synthesis of ibuprofen *via* a photo-Favorskii rearrangement
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http://pubs.rsc.org/en/content/articlelanding/2016/re/c5re00037h/unauth#!divAbstract

Making ends meet: flow synthesis as the answer to reproducible high-performance conjugated polymers on the scale that roll-to-roll processing demands
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http://onlinelibrary.wiley.com/doi/10.1002/aenm.201401996/full

Amination of aryl halides and esters using intensified continuous flow processing
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http://www.mdpi.com/1420-3049/20/10/17860/htm

An integrated flow and microwave approach to a broad spectrum protein kinase inhibitor
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http://pubs.rsc.org/en/content/articlelanding/2015/ra/c5ra09426g#!divAbstract

Light-induced C-H arylation of (hetero)arenes by in situ generated diazo anhydrides
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http://onlinelibrary.wiley.com/doi/10.1002/chem.201502357/abstract?userIsAuthenticated=false&deniedAccessCustomisedMessage=

Photodecarboxylative benzylations of *N*-methoxyphthalimide under batch and continuous-flow conditions
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http://www.publish.csiro.au/?paper=CH15356

A short multi-step flow synthesis of a potential spirocyclic fragrance component
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http://onlinelibrary.wiley.com/doi/10.1002/ceat.201500255/suppinfo

Flow synthesis of 2-methylpyridines via α-methylation
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The development of a short route to the API ropinirole hydrochloride
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A practical deca-gram scale ring expansion of (R)-(−)-carvone to (R)-(+)-3-methyl-6-isopropenyl-cyclohept-3-enone-1
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A flow-based synthesis of telmisartan
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Two-stage flow synthesis of coumarin via *O*-acetylation of salicylaldehyde
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The preparation of ethyl levulinate facilitated by flow processing: the catalyzed and uncatalyzed esterification of levulinic acid
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Photodecarboxylations in an advanced meso-scale continuous flow photoreactor
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Flow alkylation of thiols, phenols, and amines using a heterogenous base in a packed-bed reactor
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Generation and trapping of ketenes in flow
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A concise flow synthesis of efavirenz‡
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http://onlinelibrary.wiley.com/doi/10.1002/anie.201411728/abstract

A monolith immobilised iridium Cp* catalyst for hydrogen transfer reactions under flow conditions Maria Victoria Rojo,*[1] Lucie Guetzoyan[1] Ian. R. Baxendale[1,2]
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http://pubs.rsc.org/en/content/articlelanding/2015/ob/c4ob02376e#!divAbstract

Development of a flow method for the hydroboration/oxidation of olefins
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http://pubs.rsc.org/en/Content/ArticleLanding/2015/OB/c5ob00170f#!divAbstract

Reevaluation of the 2-nitrobenzyl protecting group for nitrogen containing compounds: an application of flow photochemistry
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http://www.sciencedirect.com/science/article/pii/S0040403915000106

Flow synthesis of ethyl isocyanoacetate enabling the telescoped synthesis of 1,2,4-triazoles and pyrrolo-[1,2-c]pyrimidines
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http://pubs.rsc.org/en/Content/ArticleLanding/2015/OB/c5ob00245a#!divAbstract

Heterogenization of Pd–NHC complexes onto a silica support and their application in Suzuki–Miyaura coupling under batch and continuous flow conditions
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http://pubs.rsc.org/en/content/articlelanding/2014/cy/c4cy00829d/unauth%20-%20!divAbstract#!divAbstract

The direct α-C(sp^3)–H functionalisation of N-aryl tetrahydroisoquinolines via an iron-catalysed aerobic nitro-Mannich reaction and continuous flow processing
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Efficient continuous-flow synthesis of macrocyclic triazoles
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Factors Influencing the regioselectivity of the oxidation of asymmetric secondary amines with singlet

oxygen
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Glucuronidation of bile acids under flow conditions: design of experiments and Koenigs–Knorr reaction optimization
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http://pubs.rsc.org/en/content/articlelanding/2014/ob/c4ob01911c#!divAbstract

Electroactive and photoactive poly[Isoindigo-alt-EDOT] synthesized using direct (hetero)arylation polymerization in batch and in continuous flow
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Chemical assembly systems: layered control for divergent, continuous, multistep syntheses of active pharmaceutical ingredients‡
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Continuous reductions and reductive aminations using solid $NaBH_4$
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Versatile, high quality and scalable continuous flow production of metal-organic frameworks
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http://dx.doi.org/10.1038/srep05443

Flow synthesis and biological activity of aryl sulphonamides as selective carbonic anhydrase IX and XII inhibitors
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http://www.ncbi.nlm.nih.gov/pubmed/24948563

Facilitating biomimetic syntheses of borrerine derived alkaloids by means of flow-chemical methods.
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http://dx.doi.org/10.1071/CH14530

Synthesis of a carprofen analogue using a continuous flow UV-reactor
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http://dx.doi.org/10.1021/op5002148

Continuous synthesis of organozinc halides coupled to negishi reactions
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http://dx.doi.org/10.1002/adsc.201400243

Efficient synthesis of panaxadiol derivatives using continuous-flow microreactor and evaluation of anti-tumor activity
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Continuous flow magnesiation of functionalized heterocycles and acrylates with TMPMgCl·LiCl
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http://dx.doi.org/10.1002/anie.201404221

A continuous-flow approach to 3,3,3-trifluoromethylpropenes: bringing together Grignard addition, Peterson elimination, inline extraction, and solvent switching
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Development of a Grignard-type reaction for manufacturing in a continuous-flow reactor
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http://dx.doi.org/10.1021/op500290x

First example of alkyl-aryl Negishi cross-coupling in flow: mild, efficient and clean introduction of functionalized alkyl groups
Brecht Egle[2], Juan de Muñoz[1], Nerea Alonso[1], Wim M. De Borggraeve[2], Antonio de la Hoz[3], Angel Díaz-Ortiz[3], Jesús Alcázar[1]
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A general continuous flow method for palladium catalysed carbonylation reactions using single and multiple tube-in-tube gas-liquid microreactors
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Flow chemistry meets advanced functional materials
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Multistep flow synthesis of 5-amino-2-aryl-2*H*-[1,2,3]-triazole-4-carbonitriles

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The rapid synthesis of oxazolines and their heterogeneous oxidation to oxazoles under flow conditions

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First example of a continuous-flow carbonylation reaction using aryl formates as CO precursors

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Glycosylation with *N*-acetyl glycosamine donors using catalytic iron(III) triflate: from microwave batch chemistry to a scalable continuous-flow process

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The generation of a library of bromodomain-containing protein modulators expedited by continuous flow synthesis

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http://onlinelibrary.wiley.com/doi/10.1002/ejoc.201600222/full

An efficient etherification of *Ginkgol biloba* extracts with fewer side effects in a micro-flow system

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Continuous flow synthesis of thieno[2,3-*c*]isoquinolin-5(4*H*)-one scaffold: a valuable source of PARP-1 inhibitors

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Regioselective synthesis of 3-aminoimidazo[1,2-*a*]-pyrimidines under continuous flow conditions

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Microwave irradiation and flow chemistry for a straightforward synthesis of piano-stool iron complexes
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Continuous flow macrocyclization at high concentrations: synthesis of macrocyclic lipids
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Continuous synthesis of artemisinin-derived medicines
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Consecutive oxygen-based oxidations convert amines to α-cyanoepoxides
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http://dx.doi.org/10.1039/C4CC04932**B**

Continuous-flow oxidative cyanation of primary and secondary amines using singlet oxygen
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Flow synthesis of a versatile fructosamine mimic and quenching studies of a fructose transport probe
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http://dx.doi.org/**10.3762/bjoc.9.238**

Synthesis of all four stereoisomers of 3-(tert-Butoxycarbonyl)-3-azabicyclo[3.1.0]hexane-2-carboxylic acid
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Seamless integration of dose-response screening and flow chemistry: efficient generation of structure–activity relationship data of β-Secretase (BACE1) inhibitors
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Controlled synthesis of poly(3-hexylthiophene) in continuous flow
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Integration of enabling methods for the automated flow preparation of piperazine-2-carboxamide
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Sequential flow process for the controlled polymerisation and thermolysis of RAFT-synthesised polymers
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Robust and reusable supported palladium catalysts for cross-coupling reactions in flow
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Investigating the continuous synthesis of a nicotinonitrile precursor to nevirapine
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Porous, functional, poly(styrene-co-divinylbenzene) monoliths by RAFT polymerization
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New insights into cyclobutenone rearrangements: a total synthesis of the natural ROS-generating anti-cancer agent cribrostatin 6‡
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Hypervalent iodine/TEMPO-mediated oxidation in flow systems: a fast and efficient protocol for alcohol oxidation
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The application of a monolithic triphenylphosphine reagent for conducting Ramirez *gem*-dibromoolefination reactions in flow
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Flow-based, cerium oxide enhanced, low-level palladium sonogashira and heck coupling reactions by perovskite catalysts

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The fit for purpose development of $S1P_1$ receptor agonist GSK2263167 using a Robinson annulation and Saegusa oxidation to access an advanced phenol intermediate

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Raman spectroscopy as a tool for monitoring mesoscale continuous-flow organic synthesis: Equipment interface and assessment in four medicinally-relevant reactions

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Biotransformation with whole microbial systems in a continuous flow reactor: resolution of (*RS*)-flurbiprofen using *Aspergillus oryzae* by direct esterification with ethanol in organic solvent

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Continuous flow synthesis of Coumarin

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Continuous flow-processing of organometallic reagents using an advanced peristaltic pumping system and the telescoped flow synthesis of (E/Z)-tamoxifen

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Integrated synthesis and testing of substituted xanthine based DPP4 inhibitors: application to drug discovery

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Applying flow chemistry: methods, materials, and multistep synthesis

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Controlled synthesis of poly(3-hexylthiophene) in continuous flow

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http://dx.doi.org/10.3762/bjoc.9.170

Building a sulfonamide library by eco-friendly flow synthesis
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The rapid generation of isocyanates in flow
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Continuous synthesis of pyridocarbazoles and initial photophysical and bioprobe characterization
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Microwave heating and conventionally-heated continuous-flow processing as tools for performing cleaner palladium-catalyzed decarboxylative couplings using oxygen as the oxidant – a proof of principle study
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Rapid discovery of a novel series of Abl kinase inhibitors by application of an integrated microfluidic synthesis and screening platform
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A multi-step continuous flow process for the N-demethylation of alkaloids
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A two-stage continuous-flow synthesis of spirooxazine photochromic dyes
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Ozonolysis of some complex organic substrates in flow
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Continuous synthesis and use of N-heterocyclic carbene copper(I) complexes from insoluble Cu2O
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An expeditious synthesis of imatinib and analogues utilising flow chemistry methods
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Continuous-flow generation of diazoesters and their direct use in S-H and P-H insertion reactions: synthesis of a-sulfanyl, a-sulfonyl and a-phosphono carboxylates
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Synthesis of carbohydrate-functionalised sequence-defined oligo (amidoamine)s by photochemical thiol-ene coupling in a continuous flow reactor
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http://dx.doi.org/10.1002/chem.201203927

Synthesis of RAFT block copolymers in a multi-stage continuous flow process inside a tubular reactor
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Continuous flow synthesis of organic electronic materials: case studies in methodology translation and scale-up
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Preparation of arene chromium tricarbonyl complexes using continuous-flow processing: (η6-$C_6H_5CH_3$)$Cr(CO)_3$ as an example
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http://dx.doi.org/10.1556/JFC-D-12-00018

Visible light-initiated preparation of functionalized polystyrene monoliths for flow chemistry
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Integrated continuous processing and flow characterization of RAFT polymerization in tubular flow reactors
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http://dx.doi.org/10.1002/mren.201200029

Synthesis of an H3 antagonist via sequential one-pot additions of a magnesium ate complex and an amine to a 1,4-ketoester followed by carbonyl-directed fluoride addition
Joel M. Hawkins, Pascal Dubé, Mark T. Maloney, Lulin Wei. Marcus Ewing, Stephen M. Chesnut, Joshua R. Denette, Brett M. Lillie, Rajappa Vaidyanathan
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http://dx.doi.org/10.1021/op300093j

A "catch-react-release" method for the flow synthesis of 2-aminopyrimidines and preparation of the imatinib base
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http://dx.doi.org/10.1021/ol301673q

Sustainable and efficient methodology for CLA synthesis and identification
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http://dx.doi.org/10.1039/C2GC35792E

Continuous synthesis and purification by direct coupling of a flow reactor with simulated moving-bed chromatography
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http://dx.doi.org/10.1002/anie.201202795

A continuous flow process for the radical induced end group removal of RAFT polymers
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http://dx.doi.org/10.1002/mren.201200007

Continuous flow synthesis of secondary amides by tandem azidation- amidation of anilines
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http://dx.doi.org/10.1055/s-0031-1291013

Asymmetric homogeneous hydrogenation in flow using a tube-in-tube reactor
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http://dx.doi.org/10.1002/adsc.201200073

Continuous flow hydrogenation using an on-demand gas delivery reactor
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http://dx.doi.org/10.1021/op300019w

An efficient method for the lipase-catalysed resolution and in-line purification of racemic flurbiprofen in a continuous-flow reactor
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http://dx.doi.org/10.1016/j.molcatb.2012.02.008

Soluble polymer-supported flow synthesis: A green process for the preparation of heterocycles
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http://dx.doi.org/10.1002/ejoc.201101726

Continuous flow synthesis and scale-up of glycine- and taurine-conjugated bile salts
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http://dx.doi.org/10.1039/C2OB25528F

Development of a continuous flow scale-up approach of reflux inhibitor AZD6906
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Medicinal Chemistry, AstraZeneca R&D Mölndal, Sweden http://dx.doi.org/10.1021/op200340c

Phase-transfer catalysis under continuous flow conditions: an alternative approach to the biphasic liquid/liquid O-alkylation of phenols
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http://dx.doi.org/10.1556/jfchem.2012.00020

Continuous-flow synthesis of the anti-malaria drug artemisinin
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http://dx.doi.org/10.1002/anie.201107446

Continuous proline catalysis via leaching of solid proline
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http://dx.doi.org/10.3762/bjoc.7.194

Scale-up of flow-assisted synthesis of C2-symmetric chiral PyBox ligands
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Application of flow chemistry to the selective reduction of esters to aldehydes
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http://dx.doi.org/10.1002/ejoc.201101458

Synthesis of annulated pyridines by intramolecular inverse-electron-demand hetero-diels-alder reaction under superheated continuous flow conditions
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http://dx.doi.org/10.1002/ejoc.201101538

The application of a monolithic triphenylphosphine reagent for conducting appel reactions in flow microreactors
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http://dx.doi.org/10.3762/bjoc.7.194

Continuous preparation of arylmagnesium reagents in flow with inline IR monitoring
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http://dx.doi.org/10.1021/op200275d

New insights into cyclobutenone rearrangements: a total synthesis of the natural ROS-generating anti-cancer agent cribrostatin (ROS=reactive-oxygen species)
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http://dx.doi.org/10.1002/chem.201102263

The oxygen-mediated synthesis of 1,3-butadiynes in continuous flow: using teflon AF-2400 to effect

gas/liquid contact
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http://dx.doi.org/10.1002/cssc.201100339

Lead diversification 2: application to P38, gMTP and lead compounds
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http://dx.doi.org/10.1016/j.bmcl.2011.11.033

A continuous-flow synthesis of annulated and polysubstituted furans from the reaction of ketones and a-haloketones
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http://dx.doi.org/10.1016/j.tetlet.2011.09.083

Suzuki-Miyaura cross-coupling of heteroaryl halides and arylboronic acids in continuous flow
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http://dx.doi.org/10.1021/ol202052q

The oxygen-mediated synthesis of 1,3-butadiynes in continuous flow: using teflon AF-2400 to effect gas/liquid contact
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http://dx.doi.org/10.1002/cssc.201100339

Continuous flow synthesis of conjugated polymers
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http://dx.doi.org/10.1039/C1CC14315H

Continuous-flow, palladium-catalysed alkoxycarbonylation reactions using a prototype reactor in which it is possible to load gas and heat simultaneously
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http://dx.doi.org/10.1039/C1OB05808H

Teflon AF-2400 mediated gas–liquid contact in continuous flow methoxycarbonylations and in-line FTIR measurement of CO concentration
Peter Koos, Ulrike Gross, Anastasios Polyzos, Matthew O'Brien, Ian Baxendale and Steven V. Ley
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http://dx.doi.org/10.1039/C1OB06017A

Rapid access to α-alkoxy and α-amino acid derivatives through safe continuous-flow generation of diazoesters
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http://dx.doi.org/10.1002/chem.201101590

Continuous flow photolysis of aryl azides: preparation of 3H-azepinones
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http://dx.doi.org/10.3762/bjoc.7.129

Ozonolysis in flow using capillary reactors
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http://dx.doi.org/10.1021/op200036d

Nitrile oxide 1,3-dipolar cycloaddition by dehydration of nitromethane derivatives under continuous flow conditions
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CSIRO Materials Science and Engineering, Victoria, Australia.
http://dx.doi.org/10.1071/CH11079

Nitration chemistry in continuous flow using fuming nitric acid in a commercially available flow reactor
Cara E. Brocklehurst, Hansjrg Lehmann, and Luigi La Vecchia
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http://dx.doi.org/10.1021/op200055r

Synthesis of a drug-like focused library of trisubstituted pyrrolidines using integrated flow chemistry and batch methods
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http://dx.doi.org/10.1021/co2000357

Synthesis of (+)-dumetorine and congeners by using flow chemistry technologies
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http://dx.doi.org/10.1002/chem.201100300

Preparation of fluoxetine by multiple flow processing steps
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http://dx.doi.org/10.1039/C0OB00906G

Oxidation reactions in segmented and continuous flow chemical processing using an N-(tert-Butyl) phenylsulfinimidoyl chloride monolith
Lange, Matthew J. Capener, Alexander X. Jones, Catherine J. Smith, Nikzad Nikbin, Ian R. Baxendale, Steven V. Ley*
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http://dx.doi.org/10.1055/s-0030-1259923

Decarboxylative biaryl synthesis in a continuous flow reactor
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http://dx.doi.org/10.1039/C0CC05708H

Diastereoselective chain-elongation reactions using microreactors for applications in complex molecule assembly
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http://dx.doi.org/10.1002/chem.201003148

One-flow, multistep synthesis of nucleosides by Brønsted acid-catalyzed glycosylation

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An integrated flow and batch-based approach for the synthesis of o-methyl siphonazole
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Flow synthesis of organic azides and the multistep synthesis of imines and amines using a new monolithic triphenylphosphine reagent
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A fully automated, multistep flow synthesis of 5-amino-4-cyano-1,2,3-triazoles
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A general, one-step synthesis of substituted indazoles using a flow reactor
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http://pubs.acs.org/doi/abs/10.1021/op100288t

Continuous flow synthesis of fullerene derivatives
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http://dx.doi.org/10.1021/jo2001879

Controlled RAFT polymerization in a continuous flow microreactor
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Highly efficient dehydration of carbohydrates to 5-(chloromethyl)furfural (CMF), 5-(hydroxymethyl)furfural (HMF) and levulinic acid by biphasic continuous flow processing
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Continuous flow thermolysis of azidoacrylates for the synthesis of heterocycles and pharmaceutical intermediates
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Safe and reliable synthesis of diazoketones and quinoxalines in a continuous flow reactor
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http://dx.doi.org/10.1021/ol1027927

The continuous-flow synthesis of carboxylic acids using CO2 in a tube-in-tube gas permeable membrane reactor
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A breakthrough method for the accurate addition of reagents in multi-step segmented flow processing

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http://dx.doi.org/10.1039/c0sc00603c

Continuous flow coupling and decarboxylation reactions promoted by copper tubing
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Synthesis of β-Keto esters in-flow and rapid access to substituted pyrimidines
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Synthesis of 3-aryl/benzyl-4,5,6,6a-tetrahydro-3aH-pyrrolo[3,4-d]isoxazole derivatives: a comparison between conventional, microwave-assisted and flow-based methodologies
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Flow synthesis of tricyclic spiropiperidines as building blocks for the histrionicotoxin family of alkaloids
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A continuous flow process using a sequence of microreactors with in-line IR analysis for the preparation of N,N-diethyl-4-(3-fluorophenylpiperidin-4-ylidenemethyl)benzamide as a potent and highly selective δ-opioid receptor agonist
Zizheng Qian, Ian R. Baxendale, Steven V. Ley
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http://dx.doi.org/10.1002/chem.201002147

Preparation of arylsulfonyl chlorides by chlorosulfonylation of in situ generated diazonium salts using a continuous flow reactor
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$KMnO_4$-mediated oxidation as a continuous flow process
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Synthesis of highly substituted nitropyrrolidines, nitropyrrolizines and nitropyrroles via multicomponent-multistep sequences within a flow reactor
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A gram-scale batch and flow total synthesis of perhydrohistrionicotoxin
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Effect of phase transfer chemistry, segmented fluid flow, and sonication on the synthesis of cinnamic esters
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Continuous flow palladium (II)-catalyzed oxidative heck reactions with arylboronic acids
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Reaction of Grignard reagents with carbonyl compounds under continuous flow conditions
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http://dx.doi.org/10.1016/j.tet.2010.02.078

[3+2] Dipolar cycloadditions of an unstabilised azomethine ylide under continuous flow conditions
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http://dx.doi.org/10.1016/j.tetlet.2009.12.071

A highly efficient flow reactor process for the synthesis of N-Boc-3,4-dehydro-l-proline methyl ester
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Efficient continuous flow synthesis of hydroxamic acids and suberoylanilide hydroxamic acid preparation
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The application of flow microreactors to the preparation of a family of casein kinase I inhibitors
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Multi-step synthesis by using modular flow reactors: the preparation of YneOnes and their use in heterocycle synthesis
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A flow process using microreactors for the preparation of a quinolone derivative as a potent $5HT_{1B}$ antagonist
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A flow-based synthesis of Imatinib: the API of Gleevec
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ReactIR flow cell: a new analytical tool for continuous flow chemical processing

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A safe and reliable procedure for the iododeamination of aromatic and heteroaromatic amines in a continuous flow reactor
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Development of fluorination methods using continuous-flow microreactors
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Multistep synthesis using modular flow reactors: Bestmann-Ohira reagent for the formation of alkynes and triazoles
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A bifurcated pathway to thiazoles and imidazoles using a modular flow microreactor
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The use of diethylaminosulfur trifluoride (DAST) for fluorination in a continuous-flow microreactor
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A modular flow reactor for performing Curtius rearrangements as a continuous flow process
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http://dx.doi.org/10.1039/b801631n

[3 + 2] Cycloaddition of acetylenes with azides to give 1,4-disubstituted 1,2,3-triazoles in a modular flow reactor
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Azide monoliths as convenient flow reactors for efficient Curtius rearrangement reactions
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A microcapillary flow disc reactor for organic synthesis
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A flow reactor process for the synthesis of peptides utilizing immobilized reagents, scavengers and catch and release protocols
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Fully automated flow-through synthesis of secondary sulfonamides in a binary reactor system
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Fully automated continuous flow synthesis of 4,5-disubstituted oxazoles
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Continuous flow ligand-free heck reactions using monolithic Pd [0] nanoparticles
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Tagged phosphine reagents to assist reaction work-up by phase-switched scavenging using a modular flow reactor
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A flow process for the multi-step synthesis of the alkaloid natural product oxomaritidine: a new paradigm for molecular assembly
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